

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended) An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:
  - a) SEQ ID NO. 2, SEQ ID NO. 4, SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10;
  - b) ~~[[a]]~~ the complement of SEQ ID NO. 2, SEQ ID NO. 4, SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10;
  - c) ~~a nucleic acid~~ nucleotide sequence comprising at least ~~[[289]]~~ 500 consecutive nucleotides of SEQ ID NO.2, ~~[[or]]~~ SEQ ID NO.4, SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10; and
  - d) the complement of (c). ~~a nucleic acid sequence comprising at least 500 consecutive nucleotides of SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10; and~~
  - ~~e) a complement of (c) or (d).~~
2. (Currently Amended) The isolated nucleic acid molecule of Claim 1 which is DNA.
3. (Currently Amended) The isolated nucleic acid molecule of Claim 1 which is RNA.
4. (Currently Amended) An expression vector containing the nucleic acid molecule of Claim 1.
5. (Original) A host cell containing the vector of Claim 4.
6. (Original) The host cell of Claim 5 which is a eukaryotic cell.

7. (Original) The host cell of Claim 6 which is a human cell.
8. (Original) The host cell of Claim 5 which is a prokaryotic cell.
9. (Currently amended) An isolated DNA or RNA comprising at least:
- a) ~~[[289]]~~ 500 consecutive nucleotides of SEQ ID NO. 2, ~~[[or]]~~ SEQ ID NO. 4, SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10; or
- b) the complement of 500 consecutive nucleotides of SEQ ID NO. 2, SEQ ID NO. 4, SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10. ~~500 consecutive nucleotides of: SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10; or~~
- ~~—— c) a complement of (a) or (b).~~
10. (Cancelled)
11. (Original) An expression vector containing the DNA or RNA of Claim 9.
12. (Original) A host cell containing the vector of Claim 11.
13. (Previously presented) The host cell of claim 12 which is a eukaryotic cell.
14. (Previously presented) The host cell of claim 13 which is a human cell.
15. (Previously presented) The host cell of claim 12 which is a prokaryotic cell.
16. – 20. (Cancelled)
21. (Previously presented) An isolated polynucleotide comprising the nucleotide sequence of SEQ ID NO. 4, wherein position 1389 has a cytosine to thymine substitution.
22. – 26. (Cancelled)
27. (Currently amended) An isolated nucleic acid fragment comprising at least ~~[[289]]~~ 500 consecutive nucleotide bases of the nucleotide sequence SEQ ID NO. 1.
28. – 31. (Cancelled)

32. (Previously presented) A kit comprising a probe containing a nucleic acid sequence of Claim 1 and hybridization reagents, wherein said kit detects chromosome 12 disorder in a biological sample.

33. (Cancelled)

34. (New) The isolated nucleic acid molecule of claim 1, wherein the nucleotide sequence is SEQ ID NO. 2.

35. (New) The isolated nucleic acid molecule of claim 1, wherein the nucleotide sequence is SEQ ID NO. 4.

36. (New) The isolated nucleic acid molecule of claim 1, wherein the nucleotide sequence is SEQ ID NO. 6.

37. (New) The isolated nucleic acid molecule of claim 1, wherein the nucleotide sequence is SEQ ID NO. 8.

38. (New) The isolated nucleic acid molecule of claim 1, wherein the nucleotide sequence is SEQ ID NO. 10.

39. (New) The isolated nucleic acid molecule of claim 1, wherein the nucleotide sequence comprises at least 500 consecutive nucleotides of SEQ ID NO. 2.

40. (New) The isolated nucleic acid molecule of claim 1, wherein the nucleotide sequence comprises at least 500 consecutive nucleotides of SEQ ID NO. 4.

41. (New) The isolated nucleic acid molecule of claim 1, wherein the nucleotide sequence comprises at least 500 consecutive nucleotides of SEQ ID NO. 6.

42. (New) The isolated nucleic acid molecule of claim 1, wherein the nucleotide sequence comprises at least 500 consecutive nucleotides of SEQ ID NO. 8.

43. (New) The isolated nucleic acid molecule of claim 1, wherein the nucleotide sequence comprises at least 500 consecutive nucleotides of SEQ ID NO. 10.